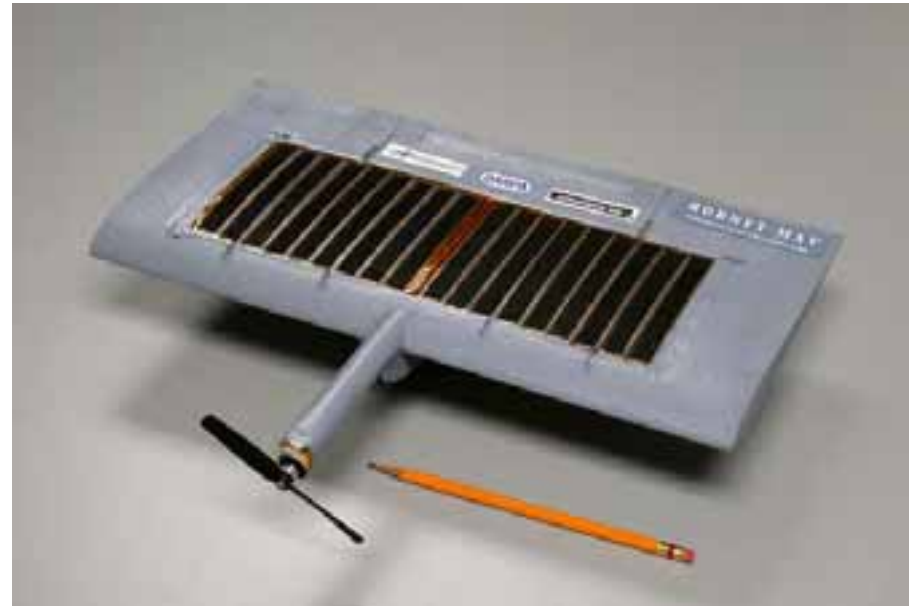


Realm of Possibilities - Training

- Wildlife Issues
- Land Projects
- Green Training Concept
- Fuels
- Tactical Vehicles

Hornet MAV – First Fuel Cell Powered Flight EVER

- Will be fully deployed by 2005 by DARPA
- 3 15 minute flights
- Powered only by fuel cells, and hydrogen on-board



Solar Cloth for the Soldier on the Move

- Nanotechnology for coating sheets of flexible plastic
- Makes all products capable of working off of solar power.
- Less batteries, weight, environmental footprint
- Solidera as individual charging units.

Ft. Bragg Private Lands Initiative and Sustainable Sandhills Initiative

By working with the community, Fort Bragg seeks alternative methods to protect its training areas:

- Private Lands Initiative has secured over 17,000 acres of land that will not be developed.
- Fort Bragg is cooperating with 6 county governments in an effort to compile data into GIS data layers that will be used by all communities for future development and environmental analyses.

Fort Carson

- Remote sense imaging to determine training's environmental effects
- Wild land Fire Program
- Night Training to decrease noise effects
- Zero Footprint Camp
- Weather Training
- Wildlife Cloning – Banteng Cows

Fort Carson's Helping Wildlife

- In 1978 fewer than 700 pure native Greenback Cutthroat Trout remained in existence
- In 1981 Fort Carson constructed a brood stock pond for this fish, with adding 40 new fish
- Now, eggs and fish have been used to establish reproducing populations within the national forests

Other Training Land Projects at Fort Carson

- Remote sense imaging to determine training's environmental effects
 - Wild land Fire Program
- Night Training to decrease noise effects
 - Zero Footprint Camp
 - Weather Training
- Wildlife Cloning – Banteng Cows

EXTi

- Removes percholate in water through electrolysis
- Works on currently contaminated water and works quickly
- Requires minimal permitting
- \$12,000

BAV-1

- Anaerobic microbe that destroys the most prevalent military land contamination chemical – vinyl chloride
- Not harmful for humans
- Takes less time than other land remediation – less than 30 years.

Green Training

- Greenbelts
- Green Munitions – bullets, missiles, and grenades
- Virtual training
- Sustainable ranges – R&D with CERL and ATSC
- Zero Footprint Camp



504th Parachute Infantry Regiment
82nd Airborne Division
Fort Bragg, NC
"Devils in Boggy Pants"



This unit examined a photovoltaic power station in a field and simulated field environment. The bottom line is this system with some modifications *can be used to provide the primary power* source for a Battalion sized Airborne Infantry Tactical Operation Center.

*From Analysis of Deployable
Applications of PV in Theater
(ADAPT): Steve Siegel, Dec 00*



Candle Wax Rocket Fuel

- Paraffin-based fuel
- By-products are CO₂, and water, not toxic materials
- Less money because it's cheaper to produce, and less harmful to the environment and workers.



Portable FC Soldiers

- Compact 20-W direct methanol fuel cell system
- High-energy, lightweight power source for the soldier

Soybean Oil in Jet Fuel?

- Soy oil can be safely blended with noncommercial jet fuel for military aircraft
- Improved air quality, reduced CO₂ emissions, and decreased water pollution from spills, and waste disposal
- Decreased foreign oil dependency



Photo by Keith Weller/Courtesy USDA

GM's Tactical Hybrids

- 40% better fuel economy than gasoline engines
- Stealth operations
- First mobile command center version with a Kevlar body, and a satellite communications

